

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/910,582

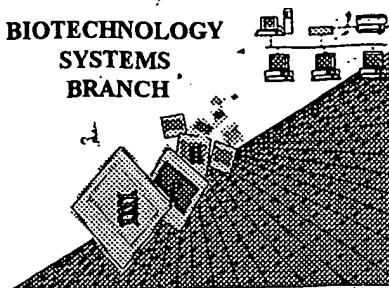
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length
Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES)
Sequence(s) 13-15 missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
 (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

RAW SEQUENCE LISTING **ERROR REPORT**

BIOTECHNOLOGY
SYSTEMS
BRANCH



0590
10K

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/910,582
Source: OIBK
Date Processed by STIC: 8/1/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/910,582

DATE: 08/01/2001

TIME: 15:16:56

Input Set : A:\Lj4857.txt

Output Set: N:\CRF3\08012001\I910582.raw

4 <110> APPLICANT: Ruoslahti, Erkki
 5 MacKenna, Deidre A.
 8 <120> TITLE OF INVENTION: Heart Homing Conjugates
 11 <130> FILE REFERENCE: P-LJ 4857
 13 <140> CURRENT APPLICATION NUMBER: US/09/910,582
 13 <141> CURRENT FILING DATE: 2001-07-20
 13 <150> PRIOR APPLICATION NUMBER: US 09/326,718
 14 <151> PRIOR FILING DATE: 1999-06-07
 16 <160> NUMBER OF SEQ ID NOS: 15
 18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 20 <210> SEQ ID NO: 1
 22 <220> FEATURE:
 23 <223> OTHER INFORMATION: synthetic construct
 25 <400> SEQUENCE: 1
 W--> 26 000
 28 <210> SEQ ID NO: 2
 29 <211> LENGTH: 7
 30 <212> TYPE: PRT
 31 <213> ORGANISM: Artificial Sequence
 33 <220> FEATURE:
 34 <223> OTHER INFORMATION: synthetic construct
 36 <400> SEQUENCE: 2
 37 Gly Gly Gly Val Phe Trp Gln
 38 1 5
 41 <210> SEQ ID NO: 3
 42 <211> LENGTH: 7
 43 <212> TYPE: PRT
 44 <213> ORGANISM: Artificial Sequence
 46 <220> FEATURE:
 47 <223> OTHER INFORMATION: synthetic construct
 49 <400> SEQUENCE: 3
 50 His Gly Arg Val Arg Pro His
 51 1 5
 54 <210> SEQ ID NO: 4
 55 <211> LENGTH: 7
 56 <212> TYPE: PRT
 57 <213> ORGANISM: Artificial Sequence
 59 <220> FEATURE:
 60 <223> OTHER INFORMATION: synthetic construct
 62 <400> SEQUENCE: 4
 63 Val Val Leu Val Thr Ser Ser
 64 1 5
 67 <210> SEQ ID NO: 5
 68 <211> LENGTH: 7
 69 <212> TYPE: PRT
 70 <213> ORGANISM: Artificial Sequence
 72 <220> FEATURE:

Does Not Comply
Corrected Diskette Needed

pp 1,3

delete, since this is an
 intentionally skipped
 sequence - see
 proper
 format on
 Error
 Summary
 Sheet
 (item 8)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/910,582

DATE: 08/01/2001

TIME: 15:16:56

Input Set : A:\Lj4857.txt

Output Set: N:\CRF3\08012001\I910582.raw

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73 <223> OTHER INFORMATION: synthetic construct
75 <400> SEQUENCE: 5
76 Gln Gly Arg Leu Tyr Asn Tyr
77 1 5
80 <210> SEQ ID NO: 6
81 <211> LENGTH: 7
82 <212> TYPE: PRT
83 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: synthetic construct
88 <400> SEQUENCE: 6
89 Ala Trp Gly Leu Ala Ser Tyr
90 1 5
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 7
95 <212> TYPE: PRT
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: synthetic construct
101 <400> SEQUENCE: 7
102 Arg Ser Met Pro Leu Leu Ser
103 1 5
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 7
108 <212> TYPE: PRT
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: synthetic construct
114 <400> SEQUENCE: 8
115 Arg Pro Gly Arg Leu Asn Gly
116 1 5
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 8
121 <212> TYPE: PRT
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: synthetic construct
127 <400> SEQUENCE: 9
128 Cys Leu His Arg Gly Asn Ser Cys
129 1 5
132 <210> SEQ ID NO: 10
133 <211> LENGTH: 12
134 <212> TYPE: PRT
135 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: synthetic construct
140 <400> SEQUENCE: 10
141 Cys Arg Ser Trp Asn Lys Ala Asp Asn Arg Ser Cys
142 1 5 10

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/910,582

DATE: 08/01/2001

TIME: 15:16:56

Input Set : A:\Lj4857.txt

Output Set: N:\CRF3\08012001\I910582.raw

145 <210> SEQ ID NO: 11
146 <211> LENGTH: 8
147 <212> TYPE: PRT
148 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: synthetic construct
153 <400> SEQUENCE: 11
154 Cys Ser Met Tyr Phe Gln Arg Cys
155 1 5
158 <210> SEQ ID NO: 12
159 <211> LENGTH: 12
160 <212> TYPE: PRT
161 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: synthetic construct
166 <400> SEQUENCE: 12
167 Cys Asn Ala Ser Ile Leu Arg Asn Gly Gln Asn Cys
168 1 5 10
171 <210> SEQ ID NO: 13
173 <220> FEATURE:
174 <223> OTHER INFORMATION: synthetic construct
176 <400> SEQUENCE: 13
W--> 177 000
179 <210> SEQ ID NO: 14
181 <220> FEATURE:
182 <223> OTHER INFORMATION: synthetic construct
184 <400> SEQUENCE: 14
W--> 185 000
187 <210> SEQ ID NO: 15
189 <220> FEATURE:
190 <223> OTHER INFORMATION: synthetic construct
192 <400> SEQUENCE: 15
W--> 193 000

Sam em

VERIFICATION SUMMARY

DATE: 08/01/2001

PATENT APPLICATION: US/09/910,582

TIME: 15:16:57

Input Set : A:\Lj4857.txt

Output Set: N:\CRF3\08012001\I910582.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:26 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (1) SEQUENCE:

L:177 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (13) SEQUENCE:

L:185 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (14) SEQUENCE:

L:193 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (15) SEQUENCE: